

## **Claims**

What is claimed is:

- 1        1. A method, comprising:  
2            storing at least one over-voltage condition occurring in an integrated circuit  
3            in a non-volatile memory.
- 1        2. The method of claim 1, further comprising:  
2            determining a specified number of stored over-voltage conditions.
- 1        3. The method of claim 2, further comprising:  
2            indicating the specified number of stored over-voltage conditions.
- 1        4. A method, comprising:  
2            comparing a operational condition with a specified condition;  
3            recording an out-of-specification condition; and  
4            determining a specified number of recorded out-of-specification conditions.
- 1        5. The method of claim 4, further comprising:  
2            detecting the out-of-specification condition as an over-voltage condition.
- 1        6. The method of claim 4, further comprising:  
2            refraining from detecting the out-of-specification condition for a specified  
3            amount of time.
- 1        7. The method of claim 6, wherein the specified amount of time is associated  
2            with a power-on reset time.

1        8. The method of claim 4, wherein the specified condition comprises a  
2        recommended operational voltage upper limit associated with an integrated  
3        circuit.

1        9. The method of claim 4, wherein recording the out-of-specification condition  
2        further comprises:  
3        recording the out-of-specification condition in a non-volatile memory.

1        10. The method of claim 9, wherein the non-volatile memory is indelible.

1        11. The method of claim 4, wherein determining the specified number of  
2        recorded out-of-specification conditions further comprises:  
3        reading a signature value stored in a non-volatile memory.

1        12. An article comprising a machine-accessible medium having associated data,  
2        wherein the data, when accessed, results in a machine performing:  
3        comparing an operational voltage with a specified voltage;  
4        recording an over-voltage condition; and  
5        determining a specified number of recorded over-voltage conditions.

1        13. The article of claim 12, wherein the data, when accessed, results in the  
2        machine performing:  
3        filtering the operational voltage for at least a duration of one clock period.

1        14. The article of claim 12, wherein recording the over-voltage condition further  
2        comprises:  
3        recording the over-voltage condition only if the operational voltage is greater  
4        than the specified voltage by a selected amount.

- 1        15. The article of claim 14, wherein the selected amount is at least about two  
2        times greater than an expected noise voltage value.
- 1        16. The article of claim 12, wherein the data, when accessed, results in the  
2        machine performing:  
3        verifying recordation of the over-voltage condition.
- 1        17. An apparatus, comprising:  
2        an indelible memory to store a selected number of out-of-specification  
3        operational conditions encountered by an electronic circuit.
- 1        18. The apparatus of claim 17, further comprising:  
2        a detection module coupled to the indelible memory to determine the  
3        existence of at least one of the selected number of out-of-specification  
4        operational conditions.
- 1        19. The apparatus of claim 18, further comprising:  
2        a filter module coupled to the detection module.
- 1        20. The apparatus of claim 17, wherein the indelible memory comprises a fuse.
- 1        21. The apparatus of claim 17, wherein at least one of the out-of-specification  
2        operational conditions comprises an over-voltage condition.
- 1        22. A system, comprising:  
2        an indelible memory to store a selected number of out-of-specification  
3        operational conditions encountered by an electronic circuit; and  
4        a display coupled to the electronic circuit.

1       23. The system of claim 22, wherein the electronic circuit comprises a  
2           microprocessor.

1       24. The system of claim 22, further comprising:  
2           a logic module to detect each one of the selected number of out-of-  
3           specification operational conditions.

1       25. The system of claim 24, wherein the logic module comprises an analog-to-  
2           digital converter.

1       26. The system of claim 22, further comprising:  
2           a memory to store a specified condition to be compared with an operational  
3           condition associated with the electronic circuit.

1       27. The system of claim 26, wherein the specified condition comprises a  
2           recommended operational voltage upper limit associated with an integrated  
3           circuit.

1       28. The system of claim 27, wherein the integrated circuit comprises a  
2           microprocessor.

1       29. The system of claim 22, further comprising:  
2           a basic input-output system to determine the selected number of out-of-  
3           specification operational conditions.